INTERNATIONAL SEARCH REPORT

International Application No PCT/US 02/30570

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B30B11/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 B30B A61J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Etectronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

| C. DOCUM | ENTS CONSIDERED TO BE RELEVANT | | |
|------------|---|----------------------------|--|
| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | 1,3, 13-15, 17,19,20 | |
| Υ | US 3 029 752 A (FRANK RAYMOND G) 17 April 1962 (1962-04-17) column 4, line 39 - line 52; figure 1 | | |
| Υ | GB 1 235 926 A (USM CORPORATION) 16 June 1971 (1971-06-16) page 3, left-hand column, line 40 - line 59; figures | 1,3, 13-15, 17,19,20 | |
| Α | US 4 292 017 A (DOEPEL WALLACE A) 29 September 1981 (1981-09-29) cited in the application column 5, line 53 -column 6, line 21; figures | 1,13 | |
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| X Further documents are listed in the continuation of box C. | X Patent family members are listed in annex. | | |
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| Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family | | |
| Date of the actual completion of the international search | Date of mailing of the international search report | | |
| 16 December 2002 | 0 3. 04. 2003 | | |
| Name and mailing address of the ISA | Authorized officer | | |
| European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 | GODOT, T | | |

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